

# Electronic Filing System (EFS) Data **Electronic Patent Application Submission USPTO** Use Only

EFS ID:

64786

Application ID:

09525615

Method, System and Apparatus

for Balanced Frequency Up-

Title of Invention:

Conversion of a Baseband Signal

and 4-Phase Receiver and

Transceiver

RECEIVED

First Named Inventor:

**David SORRELLS** 

JUL 2 1 2004

Domestic/Foreign Application:

**Domestic Application** 

**Technology Center 2600** 

Filing Date:

2000-03-14

**Effective Receipt Date:** 

2004-07-19

Submission Type:

Information Disclosure

Statement

Filing Type:

Confirmation number:

7843

**Attorney Docket Number:** 

1744.0450003

Total Fees Authorized:

Digital Certificate Holder: cn=Jeffrey Weaver,ou=Registered Attorneys,ou=Patent and Trademark

Office,ou=Department of Commerce,o=U.S. Government,c=US

Certificate Message Digest: 96803cb43d8b286f6ce1764162ff8c4565f74d25



#### TRANSMITTAL

Electronic Version v1.1 Stylesheet Version v1.1.0

> Title of Invention

Method, System and Apparatus for Balanced Frequency Up-Conversion of a Baseband Signal and 4-Phase Receiver and **Transceiver** 

Application Number:

09/525615

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First Named Applicant:

David F. SORRELLS

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Submitted by:	Elec. Sign.	Sign. Capacity
Jeffrey S. Weaver Registered Number: 45608	/JSW/	Attorney

Documents being submitted **Files** 

us-ids 1744.0450003\_Third\_Supplemental\_IDS-usidst.xml

> us-ids.dtd us-ids.xsl

Comments



### **ELECTRONIC INFORMATION DISCLOSURE STATEMENT**

Electronic Version v18 Stylesheet Version v18.0

> Title of Invention

Method, System and Apparatus for Balanced Frequency Up-Conversion of a Baseband Signal and 4-Phase Receiver and Transceiver

Application Number:

09/525615

**Confirmation Number:** 

7843

First Named Applicant:

**David SORRELLS** 

Attorney Docket Number: 1744.0450003

Art Unit:

2631

Examiner:

Phuong M. Phu

Search string:

(5682099 or 6094084 or 6067329 or 6516185

or 6687493 or 6694128 or 6704549 or 6704558

or 5490176 or 5970053 or 6078630 or 6600911 or 5179731 or 5589793 or 4510467 or 4772853

or 4972436 or 5012245 or 5422909 or 5440311 or 5926513 or 5995030 or 6047026 or 6049573 or 6076015 or 6144331 or 6018553 or 6317589 or 5058107 or 5757858 or 6531979 or 6018262

or 4761798 or 5982315 or 6459721 or 6151354 or 6169733 or 6363262 or 6697603 or 5282222 or 5949827 or 6014176 or 5678226 or 5760632

or 6160280 or 5481570 or 5745846 ).pn.

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#### **US Patent Documents**

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
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	2	6094084	2000-07-25	Abou-Allam et al.			
	3	6067329	2000-05-23	Kato et al.			
	4	6516185	2003-02-04	MacNally	B1		
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#### Remarks

Note: Remarks are not for responding to an office action.

Cite nos. 1 and 2 were cited in an Office Action in related U.S. Patent Application No. 10/317,181, filed December 12, 2002, entitled "Differential Frequency Down-Conversion Using Techniques of Universal Frequency Translation Technology," directed to related subject matter. Cite nos. 3 and 4 were cited in an Office Action in related U.S. Patent Application No. 10/317,165, filed December 12, 2002, entitled "Method and Apparatus for Reducing DC Offsets in Communication Systems Using Universal Frequency Translation Technology," directed to related subject matter. Cite nos. 5-8 are co-owned patents which are directed to related subject matter. Cite nos. 5-8 and 33 were cited in a Notice of Allowance in related U.S. Patent Application No. 09/838,387, filed April 20, 2001, entitled "Method and System for Down-Converting and Up-Converting an Electromagnetic Signal, and Transforms for Same," directed to related subject matter. Also cited in said Notice of Allowance were U.S. Patent Nos. 5,937,013, 6,061,551, and 6,647,250, which have already been cited in the present application. Cite nos. 9-12 were cited in an Office Action in related U.S. Patent Application No. 09/567,978, filed May 10, 2000, entitled "Carrier and Clock Recovery Using Universal Frequency Translation," directed to related subject matter. Also cited in said Office Action was U.S. Patent No. 5,937,013, which has already been cited in the present application. Cite nos. 13 and 14 were cited in a Notice of Allowance in related U.S. Patent Application No. 10/330,219, filed December 30, 2002, entitled "Methods and Systems for Down-Converting Electromagnetic Signals, and Applications Thereof," directed to related subject matter. Cite nos. 15-26 were cited in an Office Action in related U.S. Patent Application No. 09/566,188, filed May 5, 2000, entitled "Integrated Frequency Translation and Selectivity with Gain Control Functionality, and Applications Thereof," directed to related subject matter. Cite nos. 27 and 28 were cited in an Office Action in related U.S. Patent Application No. 09/632,856, filed August 4, 2000, entitled "Wireless Local Area Network (WLAN) Using Universal Frequency Translation Technology Including Multi-Phase Embodiments and Circuit Implementation," directed to related subject matter. Cite nos. 29-31 were cited in an Office Action in related U.S. Patent Application No. 09/569,044, filed May 10, 2000, entitled "Universal Platform Module and Methods and Apparatuses Relating Thereto Enabled by Universal Frequency Translation Technology," directed to related subject matter. Also cited in said Office Action were U.S. Patent Nos. 2,057,613; 2,241,078; 2,283,575; 2,358,152; 2,410,350; 2,451,430; 2,472,798; 4,653,117; and 5,241,561,

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which have already been cited in the present application. Cite no. 32 was cited in an Office Action in related U.S. Patent Application No. 10/289,377, filed November 7, 2002, entitled "Method and Apparatus for Reducing DC Offsets in a Communication System," directed to related subject matter. Also cited in said Office Action were U.S. Patent Nos. 5,471,665; 5,793,817; and 5,898,912, which have already been cited in the present application. Cite nos. 34 and 35 were cited in an Office Action in related U.S. Patent Application No. 09/525,185, filed March 14, 2000, entitled "Spread Spectrum Applications of Universal Frequency Translation Technology," directed to related subject matter. Also cited in said Office Action were U.S. Patent Nos. 5,339,459; 5,369,789; and 5,937,013, which have already been cited in the present application. Cite nos. 36-39 were cited in an Office Action in related U.S. Patent Application No. 09/569,045, filed May 10, 2000, entitled "Methods and Apparatuses Relating to a Universal Platform Module and Enabled by Universal Frequency Translation Technology," directed to related subject matter. Also cited in said Office Action were U.S. Patent Nos. 5,339,459 and 5,557,641, which have already been cited in the present application. Documents 40-42 were cited in an Office Action in related U.S. Patent Application No. 09/590,955, filed June 9, 2000, entitled "Phase-Shifting" Applications of Universal Frequency Translation," directed to related subject matter. Also cited in said Office Action was U.S. Patent No. 5,339,459, which has already been cited in the present application. Documents 43-45 were cited in an Office Action in related U.S. Patent Application No. 09/550,642, filed April 14, 2000, entitled "Method and System for Down converting an Electromagnetic Signal, and Transforms for Same," directed to related subject matter. Documents 46 and 47 were cited in an Office Action in related U.S. Patent Application No. 10/317,165, filed December 12, 2002, entitled "Method and Apparatus for Reducing DC Offsets in Communication Systems Using Universal Frequency Translation Technology," directed to related subject matter.

## Signature

Examiner Name	Date		